

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of )  
**MA, ET AL.** )  
Serial No: TBA )  
Filed: Concurrently Herewith )  
For: **CONTAMINENT REMOVAL BY FERNS VIA FOLIAR-APPLICATION AND )**  
**EXCISED/GROUND FRONDS**

**INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner of Patents  
and Trademarks  
Washington DC 20231

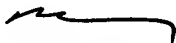
Sir:

Pursuant to the requirements of 37 CFR 1.97 and 1.98, Applicant hereby requests that the references listed in the attached form PTO-1449 be considered and made of record in the above-identified application.

Favorable consideration of the application at an early date is respectfully solicited.

Respectfully submitted,

By:

  
\_\_\_\_\_  
Brian S. Steinberger  
Attorney for Applicant  
Registration No. 36,423  
101 Brevard Avenue  
Cocoa, FL 32922  
Client No.: 23717

Date:

4/16/04

**IN THE UNITED STATES PATENT  
AND TRADEMARK OFFICE**

Attorney Docket No. FLG-039DIV (which is a Continuation-In-Part of Ser. No. 10/756,237 filed 01/12/2004, which is a Continuation-In-Part of Ser. No. 09/948,969 filed 09/07/2001, which is a Divisional of U. S. Patent No. 6,302,942, issued 10/16/2001 and U. S. Patent No. 6,280,500 issued 08/28/2001)

First Named Inventor: LENA Q. MA

For: CONTAMINENT REMOVAL BY FERNS VIA FOLIAR-APPLICATION AND EXCISED/GROUND FRONDS

**INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner of Patents  
and Trademarks  
P O Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §§ 1.97 and 1.98, record is being made below in a form PTO-1449 of documents which the Patent Office may wish to consider in connection with examination of the above-identified patent application. It is respectfully requested that the cited documents be carefully considered by the Examiner and made of record in this case. As provided in § 1.97(g), no representation is made or intended that a thorough art search was made. As provided in 37 C.F.R. § 1.97(h), this Supplemental Information Disclosure Statement does not constitute an admission of any kind, and specifically is not an admission that the documents listed on the attached PCT-1449 are, or are considered to be, material to the patentability of the above-identified patent application, as defined in 37 C.F.R. § 1.56(b).

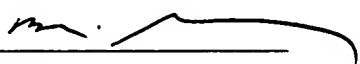
Copies of the cited references were previously submitted to the USPTO in the parent U. S. Application No.: 10/756,237 filed 01/12/2004, U. S. Application No. 09/948,969 filed 09/07/2001, U. S. Patent No. 6,302,942, issued 10/16/2001 and U. S. Patent No. 6,280,500, issued 08/28/2001 and made of record. Applicants claim priority to said application under 35 U. S. C. §120. Accordingly, copies of those documents are not provided with this Statement pursuant to 37 CFR § 1.98(d).

**A certification as specified in 37 C.F.R. §1.97(e) is submitted herewith.**

I hereby certify that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

It is respectfully requested that the cited documents be carefully considered by the Examiner and made of record in the case.

Respectfully submitted,

  
\_\_\_\_\_  
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<b>Notice of References Cited</b>	Application/Control No. 09/948,969	Applicant(s)/Patent Under Reexamination MA ET AL	
	Examiner Medina A Ibrahim	Art Unit 1638	Page 1 of 1

**U.S. PATENT DOCUMENTS**

☆		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6, 302, 942	10-2001	Ma et al	75/712
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

☆		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

☆		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

## SUPPLEMENTAL

FORM PTO-1449

US DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE1c978 U.S. PTO  
09/948969  
09/07/01

Attorney Docket No.: FLG-008CIPUS.DIV (which is a divisional of application SN: 09/546,941 filed 4/11/00 which is a Continuation-in-Part of US serial No.: 09/471,566, filed 12/23/99 (now U.S. Patent 6,280,500), claiming priority to US Serial No.: 60/129/203 filed 04/14/99)

Serial No.: 09/\_\_\_\_\_  
Filed: \_\_\_\_/\_\_\_\_/\_\_\_\_

Divisional Application of Serial No.: 09/546,941  
Filed: 4/11/00

For: METHODS FOR REMOVING POLLUTANTS FROM CONTAMINATED SOIL MATERIALS WITH A FERN PLANT  
First Named Inventor: LINKOUS

Examiner: IBRAHIM, M.

Group: 1638

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Page 1 of 1

## LIST OF ART CITED BY APPLICANT

## U.S. PATENT DOCUMENTS

EXAMINER	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
MAI ↓	5,000,852	03/19/91	Tel-Or	210	602
	5,809,693	09/22/98	Chet	47	58

FOREIGN PATENT DOCUMENTS  
NONE

## OTHER ART (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

MAI  
↓  
OA1 Blaylock, et al., ENHANCED ACCUMULATION OF PH IN INDIAN MUSTARD BY SOIL-APPLIED CHELATING AGENTS, *ENVIRON.SCI TECHNOL.* 1997, 31, p 860-865

OA2 Pickering, et al., REDUCTION AND COORDINATION OF ARSENIC IN INDIAN MUSTARD, *Plant Physiology*, April 2000, Vol. 122, p 1171-1177

OA3, Noctor, et al., GLUTATHIONE: BIOSYNTHESIS, METABOLISM AND RELATIONSHIP TO STRESS TOLERANCE EXPLORED IN TRANSFORMED PLANTS, *Journal of Experimental Botany*, Vol. 49, No. 321, p 623-647, April 1998

OA4, Ho, et al., POTENTIAL USE OF A ROADSIDE FERN (PTERIS VITTATA) TO BIOMONITOR Pb AND OTHER AERIAL METAL DEPOSITION, *Bull. Environ. Contam. Toxicol.* (1985) 35:430-438

Medina A. Ibrahim

2/03/03

# Notice of References Cited

Application No.  
09/546,941

Applicant(s)

MA et al

Examiner  
Medina A. Ibrahim

Group Art Unit  
1638

Page 1 of 1

## U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
A	5, 000, 852	3/1991	Tel-Or et al	210	602
B	5,809,693	9/1998	Chet et al	47	58
C	5,785,735	7/1998	Raskin et al	75	711
D					
E					
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## FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
N						
O						
P						
Q						
R						
S						
T						

## NON-PATENT DOCUMENTS

	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
U	Ho et al. Bull. Environ. Contam. Toxicol. vol. 35, pp. 430-438	1985
V	Noctor et al. Journal of Experimental Botany, vol. 49, no. 321, pp. 623-647	4/1998
W		
X		

**US DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE**

APPLICANT: MA, et al.

FOR: **COMPOSITIONS AND METHODS FOR REMOVING POLLUTANTS FROM CONTAMINATED MATERIALS** (Continuation-in-part (CIP) of US Serial No. 09-471,566, filed 12/23/99, claiming priority to US Provisional App. 60/129,203 filed 04/14/99)

**LIST OF ART CITED BY APPLICANT**

**U.S. PATENT DOCUMENTS**

EXAMINER	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
	AA	5,364,451	11/15/94	RASKIN	75 710
	AB	5,785,735	07/28/98	RASKIN	75 711
	AC	5,917,117	06/29/99	ENSLEY	75 722
	AD	5,927,005	07/27/99	GARDEA-TORESDEY	47 58.1
	AE	5,944,872	08/31/99	CHANEY	75 712
	AF	6,005,092	12/21/99	SHOSEYOV	536 23.6

**FOREIGN PATENT DOCUMENTS**

NONE

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

- OAA Bennett, F.A., E.K. Tyler, R.R. Brooks, P.E.H. Gregg, and R.B. Stewart (1998). Fertilisation of Hyperaccumulators to Enhance their Potential for Phytoremediation and Phytomining. Plants that Hyperaccumulate Heavy Metals. R. Brooks. New York, CAB International: 249-259.
- OAB Cullen, W.R. and K.J. Reimer (1989). "Arsenic Speciation in the Environment." Chem. Rev. (89): 713-764.
- OAC Cunningham, S.D., J.R. Shann, D.E. Crowley, and T.A. Anderson (1997). Phytoremediation of Contaminated Water and Soil. Phytoremediation of Soil and Water Contaminants. E.L. Kruger, T.A. Anderson and J.R. Coats. Washington, DC, American Chemical Society: 2-15.
- OAD Dix, M.E., N.B. Klopfenstein, J.W. Zhang, S.W. Workman, and M.S. Kim (1997). Potential Use of Populus for Phytoremediation of Environmental Pollution in Riparian Zones.
- OAE Ebbs, S.D., M.M. Lasat, D.J. Brady, J. Cornish, R. Gordon, and L.V. Kochian (1997). "Phytoextraction of Cadmium and Zinc from a Contaminated Soil." Journal of Environmental Quality 26: 1424-1430.
- OAF Fowler, B.A. (1977). Toxicology of Environmental Arsenic. Toxicology of Trace Elements. R.A. Goyer and M.A. Mehlman. New York, NY, Hemisphere Publishing Corporation. 2: 79-122.
- OAG Grant, C. and A.J. Dobbs (1977). "The Growth and Metal Content of Plants Grown in Soil Contaminated by a Copper/Chrome/Arsenic Wood Preservative." Environ. Pollut. 14: 213-226.
- OAH Huang, J.W., M.J. Blaylock, Y. Kapulnik, and B.D. Ensley (1998). "Phytoremediation of Uranium-Contaminated Soils: Role of Organic Acids in Triggering Uranium Hyperaccumulation in Plants." Environ. Sci. Technol. 32: 2004-2008.

- OAI Kramer, U., R.D. Smith, W.W. Wenzel, I. Raskin, and D.E. Salt(1997). "The Role of Metal Transport and Tolerance in Nickel Hyperaccumulation by *Thlaspi goesingense* Halacsy." Plant Physiol.(115): 1641-1650.
- OAJ Lasat, M. M., M. Fuhrmann, S. D. Ebbs, J. E. Cornish, and L. V. Kochian (1998). "Phytoremediation of a Radiocesium-Contaminated Soil: Evaluation of Cesium-137 Bioaccumulation in the Shoots of Three Plant Species." Journal of Environmental Quality 27: 165-169.
- OAK Ma, L.Q., F. Tan, and W.H. Harris. 1997. Concentration and distribution of 11 elements in Florida soils. J. Environ. Qual. 26: 769-775.
- OAL McGrath, S.P. (1998). Phytoremediation for Soil Remediation. Plants that Hyperaccumulate Heavy Metals. R.R. Brooks. New York, NY, CAB International: 261-287.
- OAM Porter, E.K. and P.J. Peterson (1977). Arsenic Tolerance in Grasses Growing on Mine Waste. Environ. Pollut. 14: 255-265.
- OAN Squibb, K.S. and B.A. Fowler (1983). The Toxicity of Arsenic and its Compounds. Biological and Environmental Effects of Arsenic. B.A. Fowler. Research Triangle Park, NC, Elsevier Science Publishers: 233-269.
- OAO Walsh, L.M. and D.R. Keeney (1975). Behavior and Phytotoxicity of Inorganic Arsenicals in Soils. Arsenical Pesticides. E. A. Woolson. Washington, D.C., ACS: 35-52.